




## Gun Violence: A Public Health Crisis

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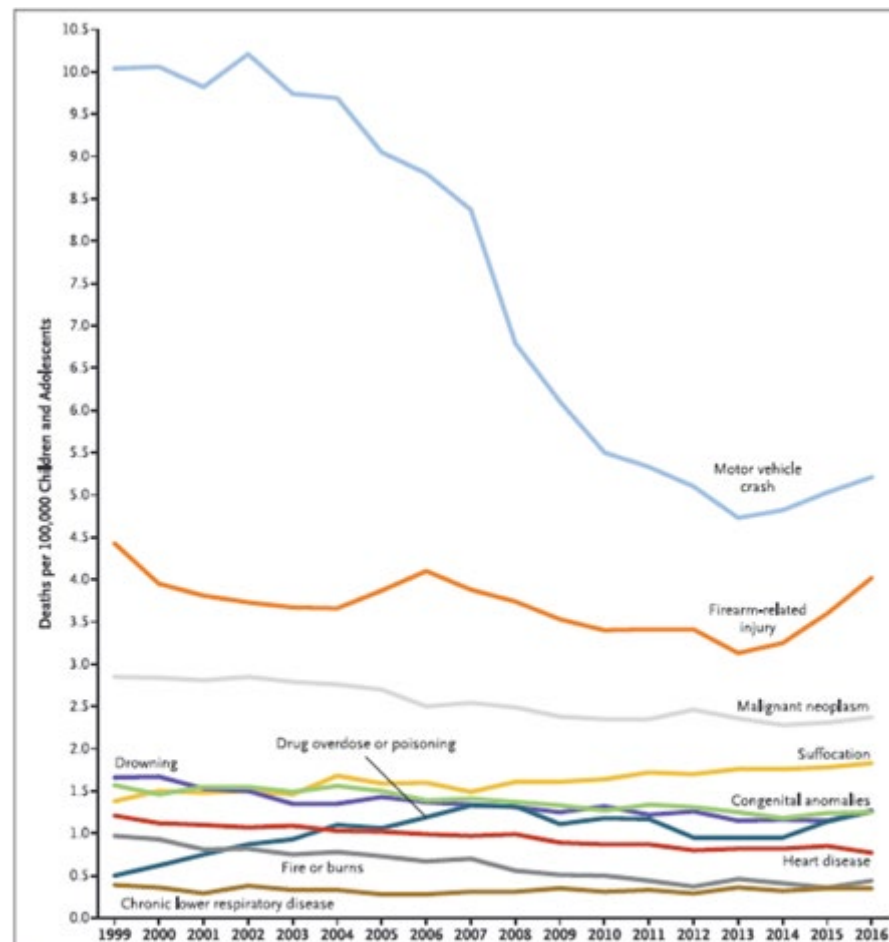
## SPECIAL REPORT

## The Major Causes of Death in Children and Adolescents in the United States

Rebecca M. Cunningham, M.D., Maureen A. Walton, M.P.H., Ph.D., and Patrick M. Carter, M.D.

**Table 1.** The 10 Leading Causes of Child and Adolescent Death in the United States in 2016, in Order of Frequency.\*

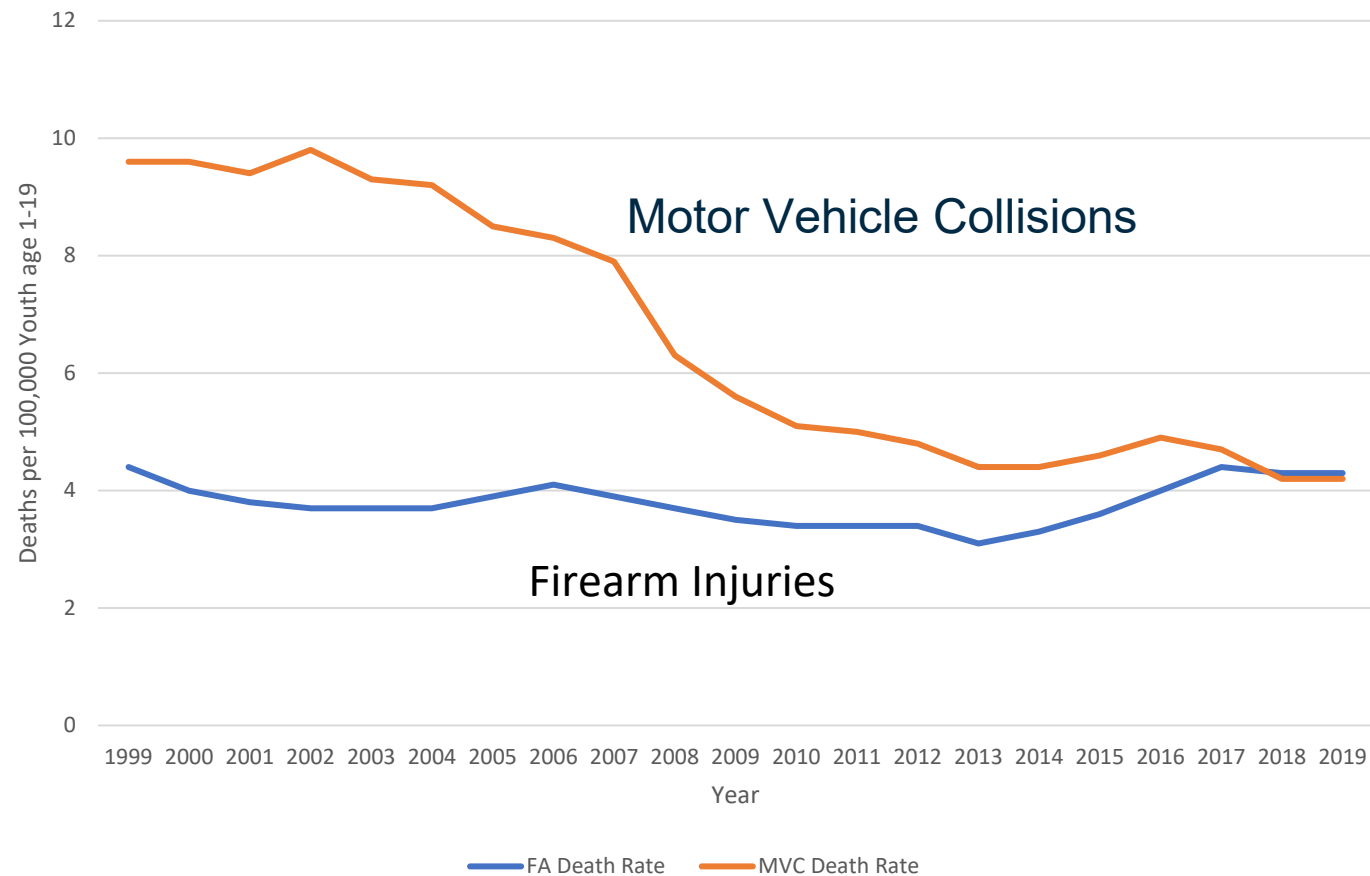
Cause of Death	No. of Deaths	Rate per 100,000 (95% CI)	Percent of Deaths
All causes	20,360	26.06 (25.70–26.42)	
All injury-related causes	12,336	15.79 (15.51–16.07)	60.6
Motor vehicle crash	4,074	5.21 (5.06–5.38)	20.0
Firearm-related injury	3,143	4.02 (3.88–4.16)	15.4
Homicide	1,865	2.39 (2.28–2.50)	
Suicide	1,102	1.41 (1.33–1.50)	
Unintentional	126	0.16 (0.13–0.19)	
Undetermined intent	50	0.06 (0.05–0.09)	
Malignant neoplasm	1,853	2.37 (2.27–2.48)	9.1
Suffocation†	1,430	1.83 (1.74–1.93)	7.0
Suicide	1,110	1.42 (1.34–1.51)	
Unintentional	235	0.30 (0.26–0.34)	
Drowning	995	1.27 (1.20–1.36)	4.9
Drug overdose or poisoning	982	1.26 (1.18–1.34)	4.8
Suicide	123	0.16 (0.13–0.19)	
Unintentional	761	0.97 (0.91–1.05)	
Congenital anomalies	979	1.25 (1.18–1.33)	4.8
Heart disease	599	0.77 (0.71–0.83)	2.9
Fire or burns	340	0.44 (0.39–0.48)	1.7
Unintentional	272	0.35 (0.31–0.39)	
Chronic lower respiratory disease	274	0.35 (0.31–0.40)	1.3



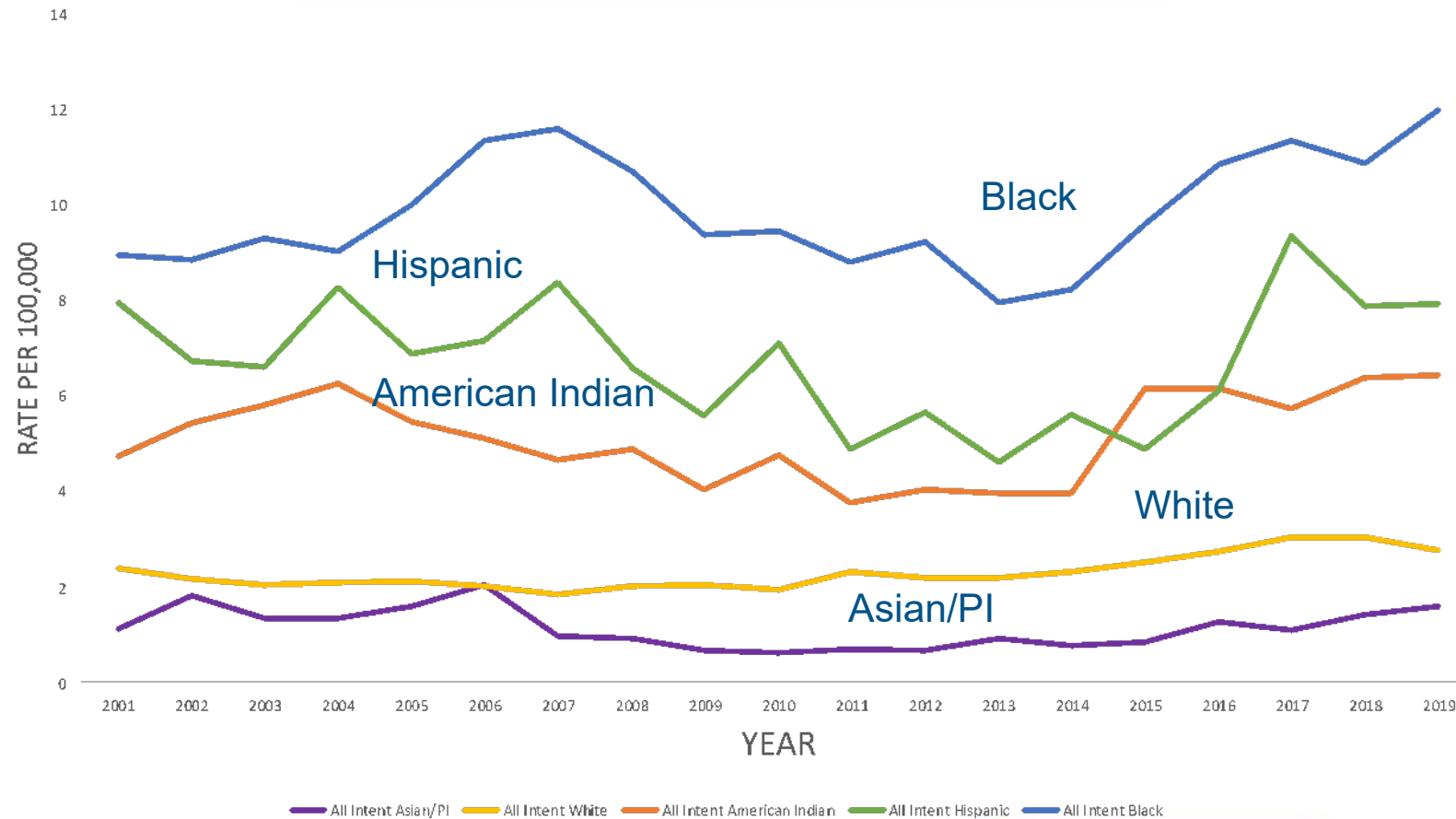
**Figure 1.** Mortality Rates (Deaths per 100,000 Children and Adolescents) for the 10 Leading Causes of Death in the United States from 1999 to 2016.

Data were obtained from the Wide-ranging Online Data for Epidemiologic Research (WONDER) system of the Centers for Disease Control and Prevention (CDC), known as CDC WONDER,<sup>2</sup> according to the codes of the *International Classification of Diseases, 10th Revision (ICD-10)*,<sup>1</sup> for the leading causes of death among children and adolescents. Age was restricted to children and adolescents 1 to 19 years of age.

# Firearm Injury and Motor Vehicle Collision Mortality Rates from 1999-2019 for US Youth Age 1-19



# Firearm Injury Mortality Rates from 2001-2019 for US Youth Age 1-19 by Race/Ethnicity

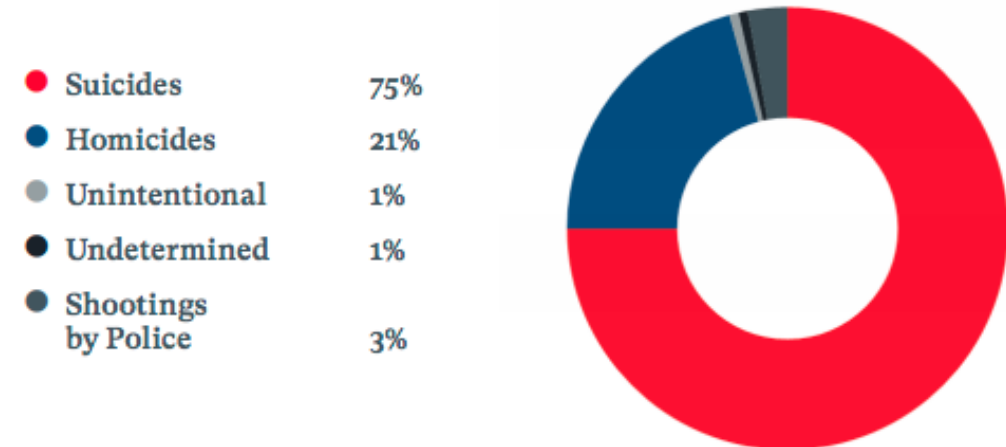


# Gun Violence in Washington

- ▶ Annual deaths: 781
- ▶ Annual non-fatal injuries: 821
- ▶ 40<sup>th</sup> highest rate of gun violence in the US
- ▶ From 2010-2019:
  - ▶ gun deaths increased 20%
    - ▶ 17% increase nationally
  - ▶ rate of gun suicides increased 19%
    - ▶ 13% increase nationally
  - ▶ rate of gun homicides increased 34%
    - ▶ 26% increase nationally

## GUN DEATHS BY INTENT

In Washington, **75%** of gun deaths are suicides and **21%** are homicides. This is compared to **60%** and **38%** nationwide, respectively.



# COVID and Gun Purchases

- ▶ According to the FBI Background Checks system, gun sales increased significantly in March 2020
  - ▶ 2020 gun sales 1.4x 2019 gun sales

NICS Firearm Checks. [https://www.fbi.gov/file-repository/nics\\_firearm\\_checks\\_-\\_month\\_year.pdf/view](https://www.fbi.gov/file-repository/nics_firearm_checks_-_month_year.pdf/view). Accessed 4/12, 2021.



# Firearm Access

- ▶ 13 million US children live in a household with a gun
- ▶ 4.6 million US children live in a household with at least one loaded, unlocked gun
- ▶ Nearly 90% of unintentional gun deaths and injuries in children occur in the home
- ▶ The firearm used in youth suicide comes from the home 9 out of 10 times
- ▶ Overwhelming evidence that the presence of a firearm in the home significantly increases risk for youth suicide

Azrael D, Cohen J, Salhi C, Miller M. Firearm Storage in Gun-Ownning Households with Children: Results of a 2015 National Survey. *J Urban Health*. 2018;95(3):295-304.

Li G, Baker SP, DiScala C, Fowler C, Ling J, Kelen GD. Factors associated with the intent of firearm-related injuries in pediatric trauma patients. *Archives of pediatrics & adolescent medicine*. 1996;150(11):1160-1165.

Grossman et al. Self-inflicted and Unintentional Firearm Injuries Among Children and Adolescents: The Source of the Firearm. *JAMA Pediatrics*. 1999



# Prevention Strategies: Responsible Storage

- ▶ Responsible storage is storing a gun **LOCKED, UNLOADED** and **SEPARATE** from ammunition
- ▶ Responsible storage is associated with decreased risk of firearm suicide and unintentional firearm injury among children
- ▶ Households with locked firearms and separate locked ammunition:
  - ▶ 78% lower risk of self-inflicted firearm injuries
  - ▶ 85% lower risk of unintentional firearm injuries

Grossman DC, Mueller BA, Riedy C, et al. Gun storage practices and risk of youth suicide and unintentional firearm injuries. *JAMA : the journal of the American Medical Association*. 2005;293(6):707-714.

Parikh K, Silver A, Patel SJ, Iqbal SF, Goyal M. Pediatric Firearm-Related Injuries in the United States. *Hosp Pediatr*. 2017;7(6):303-312.





BE SMART

# BE SMART

**SECURE**

**all guns in  
your homes  
and vehicles**

**MODEL**

**responsible  
behavior**

**ASK**

**about  
unsecured  
guns in  
other homes**

**RECOGNIZE**

**the role  
of guns  
in suicide**

**TELL**

**your peers  
to Be SMART**

# Prevention Strategies: Homicide and Community Violence

## *Hospital Based Violence Intervention Programs*

- Identify youth with violent injuries or with risks of injury
- Risk assessment: what can help this person ***never experience this again?***
- Identify needs, resources, and create action plan
  - Hospital & community
  - Intensive follow-up

Stopping the Revolving Door of Violent Injuries



### The Wraparound Project

- Assaults are the second leading cause of death among people aged 15-24 in San Francisco
- A previous injury is a major risk factor for re-injury
- Many young people become serious about changing their lives while in the hospital. Wraparound connects with young people at a teachable moment by working directly with survivors of violent injury.
- We partner with community-based organizations to address the root causes of violence



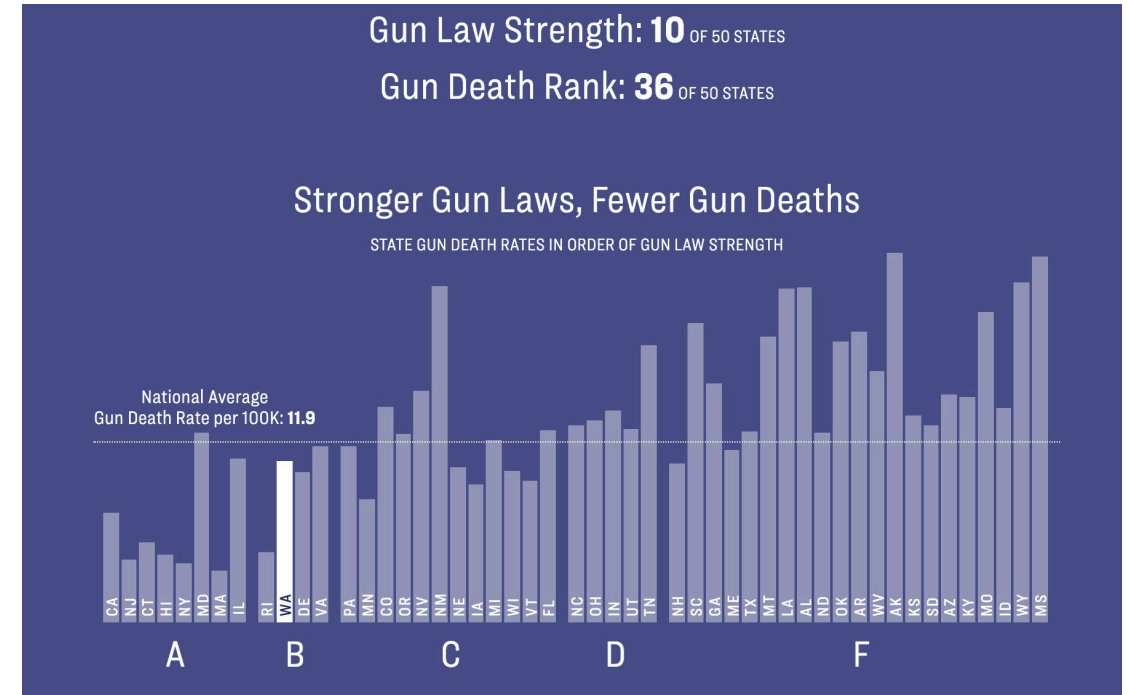
# Violence Intervention Programs

- ▶ Cities should use funding from the American Rescue Plan and other federal grant programs to fund **gun violence intervention programs**, which serve communities most impacted by daily gun violence and are proven to disrupt cycles of gun violence.
- ▶ 34 WA Cities were allocated ARP funding, including:
  - ▶ Seattle, \$232 million
  - ▶ Spokane, \$81 million
  - ▶ Tacoma, \$61 million
  - ▶ Vancouver, \$33 million
  - ▶ Kent, \$28 million
  - ▶ Yakima, \$26 million



# Cumulative Impact of Multiple Policies

- ▶ Studies assessing the relationship of firearm laws and firearm mortality by state have found that stronger laws ***collectively*** are associated with lower firearm mortalities and injuries



Simonetti JA, Fowhani-Rahbar A, Mills B, Young B, Rivara FP. State Firearm Legislation and Nonfatal Firearm Injuries. AJPH. 2015

Fleeger EW, Lee LK, Monuteaux M, Hemenway D, Mannix R. Firearm Legislation and Firearm-Related Fatalities in the United States. JAMA Intern Med. 2013.

Lee J, Moriarty KP, Tashjian DB, Patterson LA. Guns and states: Pediatric firearm injury. J Trauma Acute Care Surg. 2013

Tashiro J, Lane RS, Blass LW, Perez EA, Sola JE. The effect of gun control laws on hospital admissions for children in the United States. J Trauma Acute Care Surg. 2016

Safavi A et al. Children are safer in states with strict firearm laws: A National Inpatient Sample study. J Trauma Acute Care Surg. 2014

Gunn JF 3rd, Boxer P. Gun Laws and Youth Gun Carrying: Results from the Youth Risk Behavior Surveillance System, 2005-2017. J Youth Adolesc. 2021

# Washington Laws

[Compare Laws](#)

- ✓ Background Checks
- ✓ Charleston Loophole
- ✓ Extreme Risk Law
- ✓ Ghost Guns
- ✓ Guns Not Forced on College Campuses
- ✓ No Guns in K-12 schools
- ✓ No Stand Your Ground Law
- ✓ Permit Required to Carry Concealed Guns
- ✓ Prohibition for Convicted Dating Partners

- ✓ Prohibition for Dating Partners under Restraining Orders
- ✓ Relinquishment for Domestic Abusers Under Restraining Orders
- ✓ School Threat Assessment Teams
- ✓ Secure Storage
- ✗ High Capacity Magazine Prohibition
- ✗ No Broad Preemption Law
- ✗ Relinquishment for Convicted Domestic Abusers
- ✗ Training Required to Carry Concealed Guns



# Legislative Solutions for Child Firearm Access

- ▶ Secure storage laws are an important tool for reducing child gun deaths
  - ▶ These laws mandate that gun owners secure firearms when they are not in the owner's possession
  - ▶ There is currently no federal law specifically addressing secure storage
- 
- ▶ Seven states and the District of Columbia have laws mandating that owners secure their firearms. (CA, DC, MA, MN, NV, OR, NY, VA)
  - ▶ Fourteen states have passed another form of firearm storage laws, known as child access prevention (CAP) laws. These laws create liability for a person who fails to adequately secure a firearm if a minor accesses the firearm. (CT, DE, FL, HI, IA, IL, MD, NC, NH, NJ, RI, TX, WA, WI)



# Secure Storage Laws: Do They Work?

- Strong child access prevention laws are associated with a significant reduction in all firearm-related injuries including self-inflicted and unintentional
- Policies mandating secure storage and provision of locks are associated with a significant reduction (up to 35%) in adolescent firearm suicide

Hamilton et al. Variability of child access prevention laws and pediatric firearm injuries. Journal Trauma Acute Care Surg, 4/2018

Azad et al. Child Access Prevention Firearm Laws and Firearm Fatalities Among Children Aged 0-14 Years, 1991-2016 JAMA Peds 3/2020

Kivisto et al. Adolescent Suicide, Household Firearm Ownership, and the Effects of Child Access Prevention Laws. Journal of American Academy of Child and Adolescent Psychiatry. Pre-print.





# Extreme Risk Protection Orders

- ▶ These laws allow specific individuals (law enforcement, family, medical professionals, mental health providers, school administrators, educators) to petition a court for an order for the temporary removal of guns from dangerous situations
- ▶ A person who displays warning signs that they're considering suicide or engaging in a violent act, but who is not prohibited under federal law, would still be legally able to buy and possess guns
- ▶ Who has these laws?
  - ▶ 19 states and DC have ERPO laws (CA, CO, CT, DE, DC, FL, HI, IN, IL, MD, MA, NV, NJ, NM, NY, OR, RI, VT, VA, WA)
  - ▶ 14 states + DC passed these laws since 2018





# Extreme Risk Protection Orders: Do They Work?

- ▶ Connecticut's extreme risk law has been associated with a 14% decrease in gun suicide rates, while Indiana's extreme risk law has been associated with a 7.5% decrease
- ▶ For every 10 to 20 guns removed under Connecticut's and Indiana's extreme risk laws, approximately one life was saved through an averted suicide

Aaron J. Kivisto and Peter Lee Phalen, "Effects of Risk-based Firearm Seizure Laws in Connecticut and Indiana on Suicide Rates, 1981–2015," *Psychiatric Services* 69, no. 8 (2018): 855–862.

Swanson J. and et al. "Implementation and Effectiveness of Connecticut's Risk-Based Gun Removal Law: Does it Prevent Suicides?" *Law and Contemporary Problems*. (2017)

Jeffrey W. Swanson, et al., "Criminal Justice and Suicide Outcomes with Indiana's Risk-Based Gun Seizure Law," *The Journal of the American Academy of Psychiatry and the Law*, (2019).



# Background Checks

- ▶ Under current federal law: people who sell guns online, at gun shows, or anywhere else without a federal dealer's license—can transfer firearms without having to run a background check
- ▶ An estimated 22% of US gun owners acquired their most recent firearm without a background check
- ▶ 21 states and DC have extended background checks to at least some private sales

Miller M, Hepburn L, Azrael D. Firearm Acquisition Without Background Checks: Results of a National Survey. *Ann Intern Med.* 2017 Feb 21;166(4):233-239. doi: 10.7326/M16-1590. Epub 2017 Jan 3. PMID: 28055050.



# Background Checks: Do They Work?

- ▶ States without universal background check laws export guns across state lines at a 30% higher rate than states that require background checks on all gun sales.
- ▶ In at least 90% of cases, firearm background checks processed through the National Instant Criminal Background Check System (NICS) are resolved immediately. The average processing time for an electronic NICS-check is less than two minutes—107 seconds.

Webster DW, Vernick JS, Bulzacchelli MT. Effects of state-level firearm seller accountability policies on firearm trafficking. *J Urban Health*. 2009 Jul;86(4):525-37. doi: 10.1007/s11524-009-9351-x. Epub 2009 May 29. PMID: 19479382; PMCID: PMC2704273.

Jennifer Karberg, et al., "Background Checks for Firearm Transfers, 2015—Statistical Tables," US Department of Justice: Bureau of Justice Statistics (2017), <https://www.bjs.gov/content/pub/pdf/bcft15st.pdf>

National Instant Criminal Background Check System Celebrates 20 Years of Service," Federal Bureau of Investigation, Criminal Justice Information Services, November 30, 2018



# Mandatory Waiting Periods

- ▶ Requires a certain number of days to elapse between the purchase of a firearm and when the buyer can take possession of that gun (typically 3-14 days)
- ▶ Create an important “cooling off” period that can help prevent impulsive acts of gun violence
- ▶ There is no federal waiting period law
- ▶ 10 states and DC have some form of waiting period laws for the purchase of at least some types of firearms (CA, DC, FL, HA, IL, RI, MN, WA, IA, MD, NJ)



# Mandatory Waiting Periods: Do they Work?

- ▶ Multiple studies show decreased rates of firearm homicide and suicide
  - Repeal in Missouri resulted in significant *increase* in homicides (30%)
  - Institution of waiting period in Connecticut demonstrated homicide reduction 10 years after implementation (40%)

Anestis MD, Anestis JC, Butterworth SE. Handgun Legislation and Changes in Statewide Overall Suicide Rates. Am J Public Health. 2017;107:579-581.  
Crifasi CK, Meyers JS, Vernick JS, Webster DW. Effects of changes in permit-to-purchase handgun laws in Connecticut and Missouri on suicide rates. Prev Med. 2015;79: 43-49.



# Thank You

